

Urban Policy in Postwar Tokyo: Features and Issues

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1. Tokyo as City and Prefecture

Ensuring coherence in big city administration

As a people, the Japanese may have a reputation for adopting hard and fast rules or procedures and adhering to them faithfully. But when it comes to managing Tokyo, one of the world's great cities, they have shown remarkable flexibility and adaptability.

Tokyo Metropolis (Tôkyô-to) is a “metropolitan prefecture” consisting of 23 special wards and 39 cities, towns, and villages. The 23 special wards, while embracing a total of 8.5 million residents and 6,000 hectares, differ from municipalities in respect to their administrative responsibilities. As stipulated in the Local Autonomy Law, in the special wards, administrative functions that require integrated management “to ensure coherence and unity in the administration of a large, densely populated urban area” are the responsibility of the Tokyo Metropolitan Government (TMG), not the wards themselves.

In concrete terms, this means that a special ward cannot independently manage its own water supply, sewage system, fire-fighting appara-

tus, and so forth. Instead, the TMG provides these services for the 23 wards, treating them as a single entity. To be sure, responsibility for urban planning, authorization of construction, and similar functions has been handed over bit by bit to individual wards, but the TMG still retains authority over large-scale projects. Similarly, while some waste management responsibilities have been transferred to the wards, final waste disposal is still carried out by the TMG. The TMG handles the vast bulk of these and other services typically provided by big city governments, including the subway and bus system, public hospitals, public universities, public housing, and establishment of cemeteries and crematories, although there are instances in which the wards take over partial responsibility.

Because of this, Tokyo, although technically not a municipality, levies some of the same taxes ordinarily collected by municipal governments: the municipal inhabitant tax on corporations, the fixed assets tax, the special land ownership tax, the business establishment tax, and the city planning tax. Under the “special ward financial adjustment system,” revenues from the municipal inhabitant tax on corporations, the fixed assets tax, and the special land ownership tax are divided among the TMG and the 23 special wards to provide the wards with a “financial adjustment allocation” subsidy based on need. The allocation ratio is set by metropolitan ordinance after consultation between the TMG and the wards.

The special ward financial adjustment system redistributes revenue vertically in a manner similar to the local allocation tax system, under which the central government distributes tax revenues to fiscally strapped prefectural governments. However, it is unique in that it also

redistributes revenue horizontally, among the 23 wards.

The 23 wards and their evolution

Originally Tokyo's 23 wards were not self-governing entities but mere subdivisions within the city of Tokyo (*Tôkyô-shi*). Before World War II, the city of Tokyo was part of greater metropolitan Tokyo, referred to as *Tôkyô-fu*, along with the surrounding counties (*gun*). In 1943, the Japanese government, perceiving a need to streamline administration in conjunction with the war effort, merged *Tôkyô-shi* and *Tôkyô-fu* to create *Tôkyô-to* (Tokyo Metropolis). Since then, under a series of policy changes, the 23 wards have evolved from mere city subdivisions into increasingly autonomous entities. Public election of ward mayors was instituted in 1975. Before that, ward personnel worked for the TMG.

Throughout this period the wards have campaigned vigorously for greater autonomy, and the TMG has resisted, stressing the importance of unity and cohesion in administration of a large urban area. The dynamics of this conflict has led to continual revisions of the system, resulting in a complex series of changes.

Do the 23 wards have the autonomy of self-governing local entities, or do they not? There is no simple answer. On the one hand, the wards are able to select their own mayors and ward assembly members. In most respects, however, their powers are quite limited compared to those of ordinary Japanese municipalities in Japan.

This amorphous and flexible system makes Tokyo's management both unique and quite practical. In Tokyo urban policy is anything but clear-cut, and urban design has a chaotic look to it. There is no

consistent philosophy or principle tying together Tokyo's overall design or cityscape. Nonetheless, conflicts between competing interests are somehow resolved, the city runs smoothly, and its chaotic look gives it a charm all its own.

2. The Power of Community Organizations

Why GHQ feared the neighborhood associations

In January 1947, the General Headquarters of the Allied Occupation forces in Japan ordered the Japanese government to abolish the system of neighborhood associations. The reason: An analysis had concluded that the system had played a key role in Japan's war effort.

The system, which had taken root to the accompaniment of the cheerful ditty "Ton ton ton kararin tonarigumi" (Knock-knock Ding-dong, It's the *Tonarigumi*), had indeed played a crucial part in the war effort through top-down dissemination of directives and propaganda, mutual monitoring, and distribution of rationed goods. It was the means by which the National Mobilization Law and the Imperial Rule Assistance Association functioned at the community level.

After the war there were some who wanted to reconstitute these effective organizations into democratic community associations with publicly elected officers, independent from the central government. But GHQ flatly dismissed the proposal and ordered the system abolished.

The wartime system began at the bottom with neighborhood associations, or *tonari-gumi*, each consisting of a dozen or so households, in which participation was mandatory. Next there were neighborhood assemblies, made up of the leaders of the associations in a particular

district. In the case of Tokyo, the leaders of these neighborhood assemblies in turn gathered in ward assemblies, and the ward chiefs convened in the Tokyo Municipal Assembly. This intricate pyramidal organization extended to every household in the city of Tokyo.

The Tokyo municipal government included a Neighborhood Association Department to help ensure that orders and guidelines made their way from the top of the pyramid to the bottom. The wartime neighborhood associations, in other words, were clearly under government control. In fact, Home Ministry Directive No. 17 of 1940 explicitly designated neighborhood associations as “subordinate organs of the municipal governments.” They were also under the jurisdiction of the Imperial Rule Assistance Association.

Still, it seems safe to suppose that a good number of Japanese found the Occupation’s dissolution of the system unwarranted. While it was true that the neighborhood associations served the government during World War II, the war was over. Every society needs community organizations. Why not reconstitute the old neighborhood associations into community organizations to support Japan’s postwar democratic society? In fact, the opinion of the Home Ministry at the time was that while the neighborhood associations established as an instrument of government should be abolished, there was nothing wrong with neighborhood associations that residents organized voluntarily and independently.

Why, then, did GHQ abolish the neighborhood associations? One theory has it that the order was issued in reaction to the outcome of the 1946 elections for the House of Representatives. At this time the Occupation forces were busily purging conservative politicians from

public life. By rights, this should have seriously damaged such right-leaning parties as the Japan Progressive Party, and GHQ hoped and expected that the Japan Socialist Party would come out on top in the election. Contrary to their expectations, however, the Japan Liberal Party came in first, the Japan Progressive Party second, and the Japan Socialist Party only third. According to one theory, GHQ decided that the reason the conservative forces had won the election despite its efforts was that the neighborhood associations were still functioning and performing their wartime role.

It seems unlikely, but it is true that the political climate that prevailed for a brief time during the Occupation lends itself to this interpretation. The mission of the Occupation forces was to minimize Japan's war-making capability, and there is no doubt that at one point the Occupation sought to achieve those goals by promoting democratic reforms throughout Japanese society.

With the signing of the San Francisco Peace Treaty in 1951, Japan regained its independence, and in 1952 the order dissolving the neighborhood associations was revoked. Community associations, going by a variety of names (*chōkai*, *jichikai*, etc.), sprang up all over Tokyo Metropolis, and larger federations were also established in each ward and municipality.

Tokyo's unique communities

In Japan, discussion of the postwar community during the time spanning economic reconstruction and the period of rapid economic growth has generally been framed in terms of the collapse of rural communities and the rise of urban communities characterized by much weaker bonds

of solidarity and mutual aid, leading to a variety of problems.

Japan evolved as an agrarian society with rural communities that emphasized cooperation and mutual assistance on everything from agricultural production to daily life. However, industrialization brought about urbanization and the collapse of many of these rural communities. Moreover, such factors as long-distance commuting often prevented close local communities from forming in urban areas. For many years, merchants' associations and tenants' associations were the closest thing to a local community in Japan's urban centers.

During the 1950s and 1960s, Japan's cities were afflicted by mounting pollution and refuse problems. This triggered the rise of grass-roots civic movements and growing calls for civic participation. However, most of these movements were short-lived, rarely developing into anything more than a protest campaign. Some sociologists maintained that it was sufficient for ad hoc movements to grow up in opposition to the construction of a nearby condominium or other facility, that it was fine for such movements to dissolve once they had achieved their goals or reached a point where nothing more could be accomplished.

However, as long as residents maintain such an attitude, local government has no choice but to assume total responsibility, and the government and the citizens continue on separate paths that never intersect. During much of the postwar period, local civic movements throughout Japan were locked in an adversarial relationship with local governments instead of working with them to support the community.

In Tokyo today, by contrast, people are reassessing the role local communities can play in a new, twenty-first century model of local government.

A term sometimes used in this context is third-order devolution. First-order devolution refers to the transfer of power from the state to the prefectures, and second-order devolution the transfer of authority from the prefectures to the municipalities. Henceforth, it is argued, we need to carry out a third order of devolution, that is, the transfer of power from municipal government to communities.

Another term one hears is the *fourth sector*. The first sector is government, the second sector the private sector, and the third sector organizations that merge the public and private sectors together (extragovernmental organizations, such as public corporations). The fourth sector consists of community-based organizations. The idea is for civic organizations at the community level—whether they be called local nonprofits, social enterprises, or something else—to apply the strengths of commercial enterprises in carrying out work related to the public good, such as social welfare and environmental protection. Some refer to these groups as “community-based organizations that provide social services in a businesslike manner.”

The Japanese have begun to rethink the role of local communities because they have realized that many problems today can only be dealt with effectively at the community level. For example, with families growing increasingly concerned over local safety issues in recent years, communities all over the country have devised cooperative schemes to help ensure the safety of children when walking to and from school. In fact, with proper diligence, communities can not only protect their children on the way to and from school but prevent crime of all kinds. In this way people are coming round once again to an appreciation of the power of the community.

A growing sense of community autonomy, combined with large numbers of retiring baby-boomers, is leading to a boom in community-based activities. Increasingly, corporations are participating in such activities in conjunction with their corporate social responsibility programs. One even hears of communities that would be unable to hold their traditional festivals without the help of business, because the aging of the local population has left them without enough young men to carry the *mikoshi* shrine through the streets.

In fact, communities have a major role to play in a wide range of activities, including fire and crime prevention, community development, neighborhood aesthetics, social services, hygiene, waste disposal, and education. This is the context in which the Japanese are revisiting the role of neighborhood associations and other community organizations.

Religious and ethnic communities have played a major role in support, development, and mutual aid in Western societies. In Tokyo, that role is largely performed by neighborhood associations and other local community organizations. Their strength is their ability to play some role in a range of areas, including public safety, fire prevention, and community events.

3. Ducking the Over-centralization Issue with Multiple-Center Cities

Mock-decentralization through multiple city centers

“Multiple-center urban design” was a vision for shifting from the conventional urban structure, in which a city revolves around a single core, to a new configuration built around a number of subcenters.

Specifically, the plan involved distributing the city's business, commerce, and industry on a priority basis among a total of seven subcenters: the three pre-existing subcenters, Ikebukuro, Shinjuku, and Shibuya; three new subcenters, Ueno-Asakusa, Kinshichô-Kameido, and Ôsaki; and the waterfront subcenter. To one degree or another, each of these subcenters was either a transportation node or near to one, in an area where it would be reasonable to expect a further concentration of business and commerce.

In addition to these, five satellite cities were designated in the Tama area in the hills to the southwest of central Tokyo: Tachikawa, Hachioji, Machida, Ôme, and Tama New Town. These were also envisioned as magnets for concentrated commercial development, though not on the same scale as the Tokyo subcenters.

At the time the plan was formulated, a rising chorus of criticism was issuing from Japan's provincial cities regarding excessive concentration of urban functions within Tokyo. At least superficially, multi-center urban design appeared to hold out the promise of decentralization. In fact, it was simultaneously a means of expanding Tokyo's central district and as a way of avoiding excessive concentration in the city center.

Tokyo officially embraced the multi-center approach as a core principle of urban development in the Second Long-Term Plan for the Tokyo Metropolis, adopted in November 1986. The multi-center concept had already been incorporated as a central feature of the first long-term plan, adopted in November 1982, but it was not until the second plan that the waterfront subcenter and such satellite cities as Ôme and Tama New Town were officially added, and full-scale imple-

mentation of the multi-center concept was launched. At the time Japan's provincial cities were highly critical of the unilateral concentration of functions in Tokyo, and the multi-center urban plan helped deflect some of this criticism.

The Second Long-Term Plan for Tokyo Metropolis conferred special status on the waterfront area, stating that "the waterfront subcenter, with Tokyo Teleport at its core, will feature multiple urban functions adapted to the trends toward internationalization and computerization, information-related activities, international exchange, housing, culture, and recreation.... It will give rise to a futuristic information-oriented urban space where foreign nationals also live and work."

This concept of multi-center urban design was the theoretical basis for the transfer of the TMG offices from the Marunouchi district to Shinjuku and the intensive investment in the waterfront area that continued for a time.

Prior to this, the conventional wisdom was that cities should develop radially around a single center, with compartmentalization of functions—that is, offices in the center, commerce and services surrounding the center, and residential neighborhoods around the periphery. But the city had in fact been spreading outward since the Edo period, and now this sprawl had reached a saturation point; a single center could not longer support the rest of the city. The conclusion was that it was necessary to decentralize Tokyo's urban functions.

The result was a proposal to "correct the centralized, single-nucleus urban structure through multi-center urban design." Under this plan, subcenters were defined as "districts with high potential for future urban development, being transportation nodes and areas where large-

scale development of unutilized land or redevelopment is expected.”

From the beginning, the plan’s critics argued that the plan would not so much “disperse the functions of the city center among subcenters” as create one big center. They pointed out that the city center and the Shinjuku district were not really distinguishable from one another, since they already met each other along Shinjuku-Dōri avenue, and that the city center had long abutted the Shibuya district along Aoyama-Dōri.

Administrators countered that the Shinjuku and Shibuya neighborhoods were not primarily business and commercial districts, for as soon as one turned off Shinjuku-Dōri or Aoyama-Dōri, one found oneself on residential streets with low buildings. Under the plan, these areas in fact turned into “multifunctional districts” with medium-height multi-story buildings housing a mix of offices, stores, and downtown housing.

Two Monuments of the Multi-Center Era: The Tokyo Government Offices and the Waterfront Subcenter

As things developed, demand began to grow for a central district that offered a multiplicity of features, including downtown housing, the means of exchanging information and gathering socially, culture, and entertainment. As a result, most of the area defined by the circular Yamanote Line of Tokyo’s commuter train system came to serve as a vast city center with more diversified functions than the traditional city center.

The concept of multi-center urban design was useful in approaching urban planning from the perspective of the Kanto Plain as a whole—in other words the development of a capital-region megalopolis—instead

of remaining confined by the administrative boundaries of Tokyo Metropolis, with its oddly long and narrow east-west layout.

In other words, when considering Tokyo's urban design, it makes sense to focus on the entire area within which daily activity takes place, whether from the standpoint of urban functions or that of people's everyday lives. In the case of Tokyo, this is the area circumscribed by the National Capital Region Central Loop Road, a beltway roughly 100 kilometers in diameter, and the Tokyo Bay Aqua-Line. The National Capital Region Central Loop Road connects the surrounding cities (from east to west) of Narita, Tsukuba, Kuki-Shiraoka, Ôme, Yokota, Hachiôji, Sagamihara, and Ebina. All of these areas play an important role in the capital region.

One of the watchwords of the 1990s was "Route 16 culture." National Route 16, another loop road circling Tokyo, is flanked by a wide variety of commercial establishments, including clothing stores, restaurants, bookstores, music stores, and pachinko parlors, and every other type of entertainment establishment. This makes it a prime shopping and leisure destination for young people in cars. Route 16 disseminates Tokyo's urban culture to people living on the outskirts of the city, so that they can fill all their needs without bothering to take the train into central Tokyo. In other words, ordinary people are also starting to rebel against urban centralization.

The multi-center urban design policy played its part and was discarded, leaving behind two major monuments to that era of urban planning: a new Tokyo Metropolitan Government Building in Shinjuku, to which the Tokyo government offices moved in 1991, and the waterfront subcenter development.

In an era of continuing population growth, the emphasis was naturally on building train lines and roads out from Tokyo in an ever-expanding radial pattern. But as population growth leveled off and the economy slowed, the curtain fell on an age of city planning oriented to outward expansion of the commercial and business district.

In terms of Tokyo's official urban planning documents, Tokyo Plan 95, adopted in 1995, formally announced the transition from multi-center urban design to a goal of "renewing the city-center functions." This new policy reflects an awareness of the need to shift our urban-planning priorities from the building of new satellite cities to projects to renew existing urban infrastructure, equip and enhance newly developing cities, and improve amenities and the quality of urban space for the people who live and work in cities.

4. Interline Through Service for Smooth Long-Distance Commuting

A city where you can go car-less

The convenience of Tokyo's commuter train system is something everyone agrees on. Comparing the use of various modes of transportation in the Tokyo, Kyoto-Osaka, and Nagoya metropolitan areas, we find that the utilization rate for rail transport is 25% in the Tokyo area, as compared with 18% in the Kyoto-Osaka area and 10% around Nagoya.

The utilization rate for public transportation in the EU, including bus as well as rail transportation, is only 10%. Dissatisfied with this state of affairs from the standpoint of stemming climate change among other

considerations, the EU is now implementing CIVITAS (short for CItY-VITAlity-Sustainability) projects, which provide direct subsidies of about 50 million euros to selected local governments.

Tokyo's rail network is so extensive that most people can manage quite easily without a car of their own. The total number of train stations in Tokyo's 23 wards—Japan Railways, private lines, and subways combined—has reached more than 520. This puts it far ahead of New York, London, or Paris, each of which has roughly 400. The large number of stations in Tokyo points to a rail network so extensive that one can almost always find a station within walking distance. In the area surrounding the city center, more than 90% of neighborhoods are within a 10-minute walk of a rail station.

Another important characteristic of the Tokyo area's rail network is the interline through service provided by same-track linkages between Tokyo subway lines and private commuter lines that extend out into the suburbs, enabling many riders to commute without transferring. Connections of this sort are found in only a few other cities in the world (including Seoul, which provides through service to Incheon), and nowhere as extensively as in Tokyo.

This sort of interline through service is now taken for granted around Tokyo, and it has shortened time distances substantially. To take an extreme case, it is possible to ride from Chiba New Town all the way through to Tokyo's Haneda Airport using continuous rail lines [operated by five different entities]: the Hokuso-Kodan Line (operated by Hokusô Development Railway and the now-defunct Urban Development Corporation); the Keisei Line (Keisei Electric Railway), the Toei Asakusa Line (Tokyo Metropolitan Bureau of Transportation), and

the Keikyû Line (Keihin Electric Express Railway). Through service from the Hokusô Line to Haneda Airport is available on a daily basis.

The world's most convenient rail system

Tokyo's interline through-service network did not spring up overnight. The first instance of such a connection occurred with the extension of the Toei Asakusa Line between Asakusabashi and Oshiage, which opened for service in 1960. Before this could be accomplished, the Tokyo Metropolitan Bureau of Transportation and Keisei worked long and hard to coordinate their track construction plans and work out numerous details. Of the rail extensions to date, private lines account for 330 kilometers and subway lines for 240 km, compared with the 300 km operated by JR, testifying to the important role through service between subway and private lines has played in enhancing the convenience of urban rail transportation around Tokyo.

Another feature of Tokyo's rail system found nowhere else in the world is the existence of two complete loop lines, the JR Yamanote Line and the Toei Ôedo (subway) Line. The Toei Ôedo Line opened for service in 2000, and its ridership has continued to increase since then thanks to its large number of transfer points to other lines (21 out of 28 stations).

Yet despite the unparalleled convenience and sophistication of Tokyo's rail network, the crowding remains serious. The next phase is likely to involve carefully prioritized construction of track to connect existing lines in such a way as to enhance convenience dramatically.

Another priority should be more lines circling the city. This is needed to respond to a shift in transportation patterns from commutation into

Tokyo to interurban movement around Tokyo, as indicated by the increased crowding on such circumferential routes as the Musashino and Nambu lines.

To recapitulate, the key characteristics of Tokyo's rail network are the large number of stations, the existence of two complete loop lines, and interline through service between subways and private rail lines. These features are the product of various measures developed during the period of rapid economic growth to make long-distance commuting as smooth as possible for massive numbers of commuters. As a result of these efforts, Tokyo now has the most convenient rail network of any city in the world.

5. Multilevel Ring Roads Compensate for Low Road-Area Ratio

Tokyo's unique post-earthquake ring road plan

In New York City's Manhattan, traffic is chronically congested despite a road-area ratio of more than 20%. The reason of such high road-area ratio is that there are tightly packed skyscrapers in Manhattan. However, the traffic between midtown and downtown Manhattan (where skyscrapers are clustered) is also congested, and the reason for this is that the streets follow a rigid grid pattern, and automobiles have to stop frequently for stop lights.

When planning for automobile traffic, the most rational approach is to add several restricted-access ring roads to a city's grid-pattern street plan, constructing them in such a way that they pass under or over the other streets. Tokyo has such a plan. Unfortunately, it has not implemented it.

Tokyo's plan calls for a total of eight ring roads, something with no parallel anywhere else in the world. The plan was adopted in 1927 as part of the recovery and reconstruction plan drawn up in the wake of the Great Kanto Earthquake of 1923. Today, 80 years later, only two of these roads—Ring Road 7 and Ring Road 8—have been completed. Tokyo needs to accelerate construction of the remaining loop roads, especially the two that will run directly through the revitalized city center: Ring Road 3 (linking Gaien-Higashi-Dôri, Kototoi-Dôri, and Mitsume-Dôri), and Ring Road 4 (linking Gaien-Nishi-Dôri, Shinobazu-Dôri, Meiji-Dôri, and Maruhachi-Dôri). When complete, these roads, together with the city's two complete loop lines, will make Tokyo one of the easiest cities in the world to get around.

Relieving congestion in the Shuto Expressway system

According to the results of the Person Trip Survey (comparing 1988 and 1998 data), conducted jointly by local governments in the Tokyo area, the basic direction of traffic in the metropolitan area is already shifting from repeated back-and-forth radial movement between the city center and the suburbs to a more complex movement among communities. As the figure indicates, the pattern of traffic growth (rate of growth being indicated by a line's thickness) has become much more complex and diversified. This reflects a shift in the main functions of business offices, from large-scale document processing to knowledge production and negotiation, reflecting Japan's shift from an industrial to an information society.

For many years the four-lane Shuto Expressway Inner Circular Route was the only expressway cutting across the radial network of national

expressways that converge on Tokyo. All the automobiles and trucks crossing the Kantô Plain were obliged to use this Inner Circular Route, even if they had no business in Tokyo.

Ring roads can play an important role by relieving traffic not only on local roads inside the city but on expressway systems as well. After World War II, London and Paris adopted plans for circumferential highways circling the cities' outer edges, and today their projects are all but complete. Only Tokyo has failed to implement its plan. The city needs to move forward quickly and complete a circumferential expressway system by finishing construction on the Metropolitan Inter-City Expressway (Ken-ô-dô), the Tokyo Outer Ring Road (Gaikan), and the Central Circular Route.

Of the above, the Shuto Expressway Central Circular Route is nearest to completion. Construction on the Shinjuku Route, which runs beneath Yamanote-Dôri, is progressing, and the segment between Ikebukuro and Shinjuku was opened to traffic in December 2007. Construction on the stretch between Shinjuku and Shibuya (Ôhashi Junction) is also proceeding. When the final section, the Shinagawa Route, is open to traffic, it will largely eliminate congestion on the Shuto Expressway system.

6. Getting the Most from Greenery and Water in a City with Low Park Acreage

Loss of parkland under the Occupation's land reform

Japan has a long and sophisticated tradition of landscape gardening. From medieval to early modern times magnificent gardens were creat-

ed for numerous castles and daimyo estates, as well as temples and shrines, and many of these exist today. Tokyo also boasts gardens built by common citizens, such as Mukôjima Hyakka-en.

Hibiya Park, built as part of the Tokyo redevelopment plan launched in the Meiji era (1868-1912), was Japan's first modern urban public park. Opened in 1903, it has now been in existence for over a century. Beset by land and design problems, the plan faced tough obstacles to completion, but once it was opened it drew large numbers of visitors, many of them drawn by the novelty. With the addition of fountains and flower gardens, large and small outdoor concert pavilions, an auditorium, and a library, it has continued to develop as a public place for people to gather and enjoy themselves. Although only 16 hectares in area, it remains Japan's best-known public park.

The first concerted effort to build public parks all around Tokyo began during the reconstruction following the Great Kantô Earthquake of 1923. During that time several dozen public parks, including Sumida, Hamacho, and Kinshichô parks, were created with the primary purpose of establishing firebreaks to prevent conflagrations from spreading out of control. This was also when Yokohama's famous Yamashita Park was built.

In 1940, regulations concerning green space were established under the old City Planning Law. The enactment of these provisions was spurred partly by the principles adopted by the 1923 International Town Planning Conference, but the military situation surrounding Japan at the time also had a strong impact, as indicated by the stated purpose of establishing the green spaces: First, to facilitate air defense; second, to improve the Japanese physique; and third, to enhance production.

Under this program the land set aside in Tokyo for green space up through 1943 amounted to a total of 1,413 hectares, including Mizumoto Park (169 hectares), Shinozaki Park (127 hectares), Toneri Park (101 hectares), Koganei Park (91 hectares), and Kinuta Park (81 hectares). But before these areas could be developed into modern urban parks, war broke out, and Japan went down to defeat.

General Douglas Macarthur, who headed the Allied Occupation of Japan, worked hard to promote democratic reforms in Japan, but he was less interested in Tokyo's reconstruction. The Tokyo Metropolitan Government drew up a comprehensive plan for Tokyo's postwar recovery, but Macarthur was uninterested. Through agricultural land reform, the centerpiece of the Occupation's reform policies, he wanted to break up and transfer acreage—excepting forest land—from big land holders and absentee landlords to the farmers who worked the land. This was a laudable goal from the standpoint of promoting democratic reforms in a country where some feudal systems lingered. Unfortunately, it gave no consideration to the situation in urban areas like Tokyo. In 1946, the Owner-Farmer Establishment Special Measures Law was enacted uniformly across the country, and the policy of dividing up large tracts of cultivated land and selling it at low prices to those doing the actual cultivation was enforced mechanically, without regard to the circumstances.

Despite limited park area, abundant water and greenery

From the standpoint of Tokyo's public parkland, the postwar agricultural land reform did incalculable damage. During and immediately after World War II authorities had permitted much of the land that

Tokyo Metropolis (known as the city of Tokyo until 1943) had set aside for public parks and other green space to be used as farmland in an effort to cope with food shortages. Under the agricultural land reform program, such land was also parceled out to farmers.

The amount of parkland and green space lost to Tokyo through the postwar agricultural land reform amounts to some 460 hectares—about half of the land currently dedicated to parks and green spaces in the city. Ōsaka and Nagoya suffered a similar fate. The Tokyo Metropolitan Government has spent more than 60 years trying to buy back this land using residential tax revenues, but the task is far from complete.

The Urban Parks Law is relatively new, having been enacted in 1956. Most of the metropolitan government's efforts to gradually buy back land for parks with residential tax revenues occurred from the late 1950s to the early 1970s.

In 1984, the TMG adopted a “Greenery Doubling Plan” aimed at increasing the per capita land area of Tokyo's parks from 3.1 square meters to 6.0 square meters. Twenty years later, it is still only about 4.5 square meters in the 23 wards.

The percentage of land devoted to parks in the 23 wards is only about 6%—as compared with roughly 20% in cities like New York and Paris—and in some wards the ratio is closer to 1% or 2%. Tokyo's residents are acutely conscious of this problem, and it is time to address it.

It should be noted, however, that while Tokyo as a whole continues to grapple with the challenge of expanding park acreage, the city center has considerable greenery. Furthermore, Tokyo's charm is enhanced by ubiquitous vestiges of the waterfront townscape of Edo, a city crisscrossed by waterways. In those sections of central Tokyo that overlap the

most urbanized district of old Edo, waterfront acreage accounts for 6% of the total. Tokyo's challenge in the years ahead is to increase the number and size of neighborhood parks in the 23 wards while preserving and expanding these waterfront areas.

7. Tokyo's Shifting Floor-Area-Ratio Standards

Floor area ratio (FAR) is the ratio of the total floor area of a building or buildings on a parcel of land to the area of that parcel. Japan began using FAR standards in 1963 to facilitate a planned approach to the construction of urban facilities and ensure that the density of each urban district did not exceed the capacity of that area's infrastructure. Previous to the adoption of this system, building height was limited to 20 meters (70 *shaku*) in residential districts and 31 meters (100 *shaku*) elsewhere, but with the adoption of FAR, regulations restricting building height were eliminated. This opened the way for construction of the 147-meter-tall Kasumigaseki Building, completed in 1968.

In subsequent years a series of supplementary systems and provisions—integrated design, special districts, designated urban renewal areas, and so forth—were introduced to enable relaxation of FAR standards for buildings that met certain conditions with respect to community function. In this way, progressive relaxation of FAR regulations over the years has proceeded to the point where the system now bears scant resemblance to that originally adopted.

In 1993, buying and selling of FAR rights was conducted for the first time. Taking advantage of the “special district” system, the Hibiya International Building, Fukoku Seimei Building, and Hibiya Central Building purchased unused FAR from the Japan Press Center Building

and launched an integrated neighborhood development project that included creation of such urban infrastructure as green roads, district cooling and heating facilities, and a regional electrical substation. Although the Hibiya Central Building was on the opposite side of the street from the other buildings, the TMG permitted the transfer of development rights from one side of the street to the other. Under the special-district system, the transfer of development rights across a city street was also permitted in the case of the Shin Aoyama Building in Aoyama 1-chome, and today such transfers are fairly common.

The practice of allowing the transfer of unused FAR is predicated on the thinking that since FAR standards for a district are based on the capacity of the urban infrastructure in that district, it is not a problem for individual buildings to exceed those standards as long as the FAR for the entire district remains constant.

The history of the FAR system is a history of progressive relaxation of regulations. As the system stands today, it can no longer be regarded as a basic tool for architecture control in urban areas. This means that other standards are needed for that purpose.

When the Roppongi Hills complex was being built, much attention was focused on the height of its tallest building—238 meters—which made it visible from almost anywhere in the city center. In fact, however, the FAR of the complex is fairly low at 660%—about half that of the Tokyo Metropolitan Government buildings (1,300%) and less than half that of the Shin Marunouchi Building (1,437%). The reason is that Roppongi Hills was designed with a relatively large amount of open public space, including a plaza and a park, as well as a ward road and even a road connecting the Tokyo Metropolitan highway system's

Ring Road No. 3 to Roppongi-Dōri. Because these roads and facilities take up a large portion of the 11-hectare site, the FAR is relatively low despite the buildings' unusual height.

By contrast, the Mitsukoshi Building in Ginza, though a mere 31 meters tall, has a FAR of 1,300%. Built during the era of height limits instead of FAR standards, it was designed with six basement levels. Still, there have never been complaints or problems relating to the building's high FAR.

The height of buildings can cause a number of problems, however. Tall buildings are especially apt to clash with the surrounding townscape. A single low building can also cause problems if it disrupts the skyline. And regardless of height, when buildings, such as row houses, abut one another, the townscape can be ruined by too many gaps. However, as the system stands now, as long as developers meet the FAR standards, together with lot-coverage and safety regulations, developers can generally build whatever they like.

Functional and aesthetic standards for architectural control

At a time when construction was proceeding at such a rapid pace that urban infrastructure was hard-pressed to keep pace, there may have been a rationale for the use of FAR standards as the basis for architectural control. Today, however, when the priority has shifted to enhancing urban functions and the urban landscape, it would make more sense to base architectural control on local functional and aesthetic criteria.

To begin with, in today's world higher FAR does not necessarily mean an increase in traffic or energy demand, particularly in the case of office buildings. In the industrial era, when a company's headquar-

ters was typically crammed with the many office workers needed for the massive job of document processing, higher FAR invariably meant a larger number of workers on the site. But in today's information society, when office workers are expected to be engaged in knowledge production and negotiation, the space of a company's main office must be designed with comfort and social interaction in mind. And needless to say, office equipment also takes up considerable space. For this reason, higher FAR does not invariably mean a larger number of employees on site. In the industrial age, main offices focused narrowly on clerical and administrative functions. In the information age, with the emphasis on human interaction, the trend is toward creating complex, diversified communities that include restaurants, shops, and even hotels.

As the times change and the functions of the company headquarters change with them, the form and function of the city center are shifting as well. It follows that our approach to regulating building also must change. Simply relaxing FAR standards will not lead to the kind of urban development that meets the demands of our era. This is no doubt why London has abandoned its FAR system, while New York has set a maximum FAR so high (2,160%) that one can almost say the sky is the limit.

Tokyo can handle greater vertical or spatial density, but it needs more open space from the horizontal, planar perspective. It also needs more centrally-located housing.

The four wards that make up central Tokyo (Chiyoda, Chûô, Minato, and Shinjuku) cover 6,000 hectares. While the daytime population of this area is 3 million, its nighttime population is only 550,000. Man-

hattan is also about 6,000 hectares, and although its daytime population is about the same as central Tokyo's—3 million—its nighttime population is 1.5 million. To view it another way, the nighttime population density per hectare is 250 in Manhattan, as compared with 30 in Chiyoda Ward, 80 in Chûô Ward, 80 in Minato Ward, and 150 in Shinjuku Ward. Even Nakano Ward, generally regarded as an area with a high nighttime population density, has only 200 people per hectare. In other words, even Nakano Ward has a sparser nighttime population than Manhattan.

However, if Tokyo shifts away from the FAR system, the metropolitan government will no longer be able to force developers to provide their own open space, in the form of roads and parks, as the price of relaxed FAR standards. If a successful policy shift is to occur, the TMG will also have to resign itself to shouldering the cost of roads and parks through public funding—and the same applies to taxpayers. It is hardly an unreasonable expectation.

8. A Bid to Host the Olympics as the World's Most Energy-Efficient City

A city shaped by floods, earthquakes, and volcanoes

Much of Tokyo's most important urban infrastructure was created in response to major disasters.

In 1910, flooding caused by a typhoon kept the Asakusa district and other parts of Tokyo's low-lying old-town area (*shitamachi*) under water for upwards of 10 days. This disaster prompted the construction of the Arakawa floodway (now simply called the Arakawa river), a

channel some 500 meters wide and 22 kilometers long. Construction, which took 15 years, cost about 30 million yen (in nominal terms). No sooner was the floodway finished than an even larger typhoon struck. There was no flooding. Since economic losses from the flood of 1910 had amounted to more than 100 million yen (at a time when national income was only 2.9 billion yen), the Arakawa floodway is regarded as a public works project that fully paid for itself the first time it was put to the test.

During the recovery efforts following the Great Kantō Earthquake of 1923, Tokyo Mayor Gotō Shinpei spearheaded the construction of most of the avenues that now form the main arteries of Tokyo's street system, including Shōwa-Dōri, Yasukuni-Dōri, and Harumi-Dōri. This period also saw the creation of a number of important public parks, including Sumida Park—Japan's first riverside public park—Hamachō Park, and Yokohama's Yamashita Park, the nation's first seaside park. Also around this time, several steel bridges were built across the Sumida River—including the well-known Azumabashi and Umayabashi bridges—which are still in use. In the aftermath of the earthquake the city also devoted itself to minimizing damage from future earthquakes through community design that paired elementary schools with parks, as well as nationwide construction of the Dōjunkai apartment buildings, built from fire-proof materials. The aforementioned plan for constructing eight ring roads was also adopted during the earthquake reconstruction period. Building standards for earthquake resistance have been strengthened each time Tokyo has experienced a major earthquake.

Scientists tell us that the Kanto district has been subject to major volcanic events over the ages. For example, 25,000 years ago, the

eruption of the Kagoshima Aira caldera deposited 10 centimeters of volcanic ash over the district, and many of the geological features we see in the region today were formed by the eruption of Mount Fuji in 1707 and that of Mount Asama in 1783.

Volcanic eruptions have not only shaped the geology of the district; they have also strengthened its communities. Recent eruptions on islands administered by the Tokyo Metropolitan Government required the islands' inhabitants to evacuate en masse and live as refugees in mainland Tokyo. During the Izu-Ôshima eruption of 1986, that situation continued for a month; it continued for four and a half years during the Miyakejima eruptions that began in 2000. Refugees from the Miyakejima eruption were scattered, being placed in public housing in existing communities throughout the Kantô district instead of centralized locations. During that period, the support efforts of the local host communities, combined with the refugees' own civic activities centered on the Miyakejima Disaster Support Volunteer Network, functioned so effectively that there was not a single report of a solitary death (that is, a death from natural causes that was not discovered by others until several days later). This bespeaks the strength of Tokyo communities, notwithstanding much talk to the contrary.

Projecting the image of a high-tech energy-efficient city

We have seen that Tokyo has grown stronger with each natural disaster it has withstood, whether it be an earthquake, a flood, or a volcanic eruption. At the same time, as the capital of a country with extremely limited energy resources of its own, Tokyo has built up an energy-efficient urban structure that few cities in the world can rival.

Today, with global warming emerging as humankind's biggest threat, Tokyo should be demonstrating to the world this energy-efficient structure and the cutting-edge technology on which it is based. A bid to host the Olympics provides an excellent opportunity to do just this.

Some have questioned whether Tokyo can make a successful bid to host Olympics, having already done so in 1964. But London, which has already hosted the Olympics twice, was chosen over Paris to host the games again in 2012.

The London Plan aims to use the Olympics as a catalyst for revitalization of London's East End, which is dominated by low-income households, especially immigrants. This policy is viewed as consistent with the principle of ending discrimination set forth in the Olympic charter.

By the same token, Tokyo has a chance to win its bid for the 2016 Olympics if it can portray itself to the world as an energy-efficient city of the future. Another principle put forth in the Olympic Charter is the promotion of a peaceful society. By publicizing ways of fighting global warming, which threatens to trigger a rising tide of climate refugees and exacerbate international conflicts, one can make an important contribution to world peace, a fact the Nobel Foundation acknowledged in awarding the 2007 Peace Prize to former U.S. Vice President Al Gore.

In December 2006, the TMG adopted a policy document titled "Tokyo's Big Change: The 10-Year Plan," which lays out a commitment to "create the city with the world's lowest environmental load." A key to fighting global warming will be the creation of a society that gets the energy it needs without depending on fossil fuels. Japan has

long been a beacon of advanced technology, particularly energy-efficient technology. In terms of energy intensity (energy consumption per unit of gross domestic product), Japan is the most energy-efficient country in the world—about twice as efficient as the United States. Among the world's big cities, Tokyo stands on the cutting edge. Now it should strive to become a model city in the fight against global warming by attacking the problem vigorously through the proactive use of new commercial technologies.

Major events representing the postwar urban policies in Tokyo

Year Event

- 1910 Serious flood disasters occurred. Development of floodways in Arakawa was decided.
- 1923 The Great Kanto Earthquake struck. Major infrastructures including roads, parks, bridges, and public housings were built under the earthquake disaster reconstruction plan developed by the Interior Minister Shimpei Goto (Former Tokyo City Mayor)
- 1927 Ring road planning decision was made
- 1943 In order to wage the war, the city of Tokyo and Tokyo prefecture were merged to create the Metropolis of Tokyo. 23 wards were considered inward entities. Town councils are positioned as “Supportive organization of municipalities under the Interior Ministry’s Directives.
- 1945 Great Tokyo Air Raids
The end of the War
The Occupation authorities’ headquarters ordered the emancipation of women, the democratization of education, the dissolution of the zaibatsu, the emancipation of farm lands, and etc
- 1946 Tokyo’s city reconstruction planning road decision was made. (The Occupation authorities’ headquarters denied it)
The promulgation of Japanese Constitutions
- 1947 Seiichiro Yasui was elected in the Director-General of Tokyo Metropolitan Government. The Director-General was renamed to Governor of Tokyo Metropolitan Government.
Local Government Act was enacted

- The Occupation authorities' headquarters ordered the Government of Japan to abolish the town council system
- 1949 The Shoup Report on local taxation system was made
- 1951 San Francisco Peace Treaty was signed and Japan regained its independency
- 1952 The US forces returned Haneda Airport to Japan
Cancellation of the order to abolish the town council system
- 1954 The subway Marunouchi Line was open to traffic
- 1957 The US forces returned Harumi Pier to Japan
- 1958 The license was granted to the Metropolitan subway Asakusa Line (Since the approval of the Asakusa Line, the subway system in Tokyo has been operated by Teito Rapid Transit Authority which was run jointly by the Government of Japan and the Tokyo Metropolitan Government and the Metropolitan subway run by the Tokyo Metropolitan Government, respectively)
- 1959 Ryotaro Azuma was elected to Governor of Tokyo Metropolitan Government. Tokyo was selected to be the site for the Olympic Games
- 1960 The Metropolitan subway Asakusa Line and Keisei Electric Railway adjusted their rail track specifications for conducting mutual direct operations. Since then, such mutual direct operations among suburban railroads and inner city subways have started to develop
- Sister-city affiliation with the city of New York was signed
- Insurgence broke out in Sanya area where many daily workers live
- The fight against the Japan-U.S. Security Treaty boiled up

1960 and after

Such social issues as pollution and waste problems became serious and civic movements against these issues got very active

1963 Long-term plans for Tokyo Metropolis were instituted

Height limit of 20 meters for residential areas and 31 meters for the other areas were removed. Floor-area ratio regulation was introduced

1964 The Tokyo Olympic Games was held. The Shuto Expressways were opened to traffic and the Tokaido Shinkansen lines (bullet train lines) were opened to traffic

1965 Tama Newtown Planning Project decision was made

1967 Ryoukichi Minobe was elected to Governor of Tokyo Metropolitan Government

The removal of the Metropolitan streetcars (tramcar services in Tokyo) initiated due to countermeasure against automobile traffic congestions

1968 Kasumigaseki Building, the first towering building, was completed

The Tokyo Metropolitan Government and Tokyo Electric Power signed the pollution prevention agreement

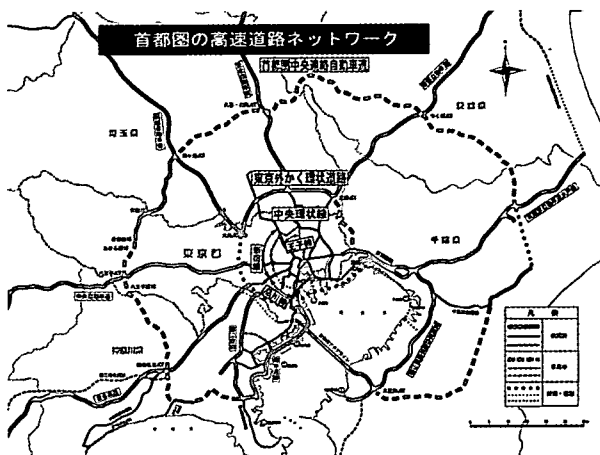
Tokyo Metropolitan Consumer Affairs Bureau was established

1969 The demolishment of the Metropolitan gambling launched

1971 Due to the freeze policy of the development of the outer ring roads, the Shuto Expressways intended for inner-city traffic were connected to Tomei Expressway which constituted the core of the national road network, so the traffic congestion in the Shuto Expressways became chronic

- The disaster prevention reconstruction at Shirahigé Higashi area in Sumida Ward launched
- The sorted collection of wastes started
- 1972 Welfare benefits for bedfast elderly people without nursing-care services started
- Quasi-public election took place for the ward mayor in Shinagawa Ward
- 1974 The overassessment for corporate income tax was implemented
- The issue to build a waste disposal facility in Suginami was settled with the opposition group
- 1975 The ward mayor public election system was implemented
- 1979 Shunichi Suzuki was elected to Governor of Tokyo Metropolitan Government
- 1982 The first long-term plan for Tokyo Metropolis was instituted. Since then, the rolling system of a 10 year long-term plan and 3 year implementation plan based on the long-term plan has become established.
- Either plan clearly demonstrated its operating budget
- 1983 The disaster prevention reconstruction at Shirahige Nishi area in Arakawa Ward launched
- The eruption of the Miyakejima Island occurred. About 400 houses were buried in the lava flows
- 1985 The 7th Ring Road was fully opened to traffic
- 1986 "The Second long-term plan for Tokyo Metropolis was instituted. Idea of structuring multi-center cities was seriously laid out
- Oshima island erupted. The island's entire population of 10,000 was evacuated to mainland Tokyo for one month

- 1991 The Metropolitan Government offices moved from Marunouchi to Shinjuku
- 1993 Due to economic recession, Tokyo was the only local government that did not accept the local allocation tax
- 1995 The Great Hanshin Earthquake occurred
Yukio Aoshima was elected to Governor of Tokyo Metropolitan Government and cancelled the World City Expo 96
“Tokyo Plan 95” clearly demonstrated ‘Renewal of inner-city functions’ and ‘Internationalization of Haneda Airport’
- 1999 Shintaro Ishihara was elected to Governor of Tokyo Metropolitan Government
- 2000 Miyakejima island erupted. The island’s entire population of 3,800 was evacuated to the mainland Tokyo for four and a half years
The Metropolitan subway Oedo Line was opened to traffic. Together with Yamanote Line, there are two loop lines in Tokyo
Decision to impose the pro forma based taxation against large banks was made
Ordinance on diesel exhaust emission was enacted
Tokyo District Court sentenced to cancel the decision of the quadruple-tracking project operated by Odakyu Electric Railway
(Almost all the necessary site acquisitions have been completed and constructions are in place) (Later, Tokyo High Court ruled in favor of the project)
- 2001 Government of Japan and the Tokyo Metropolitan Government agreed with the addition of the fourth runway at the Haneda Airport



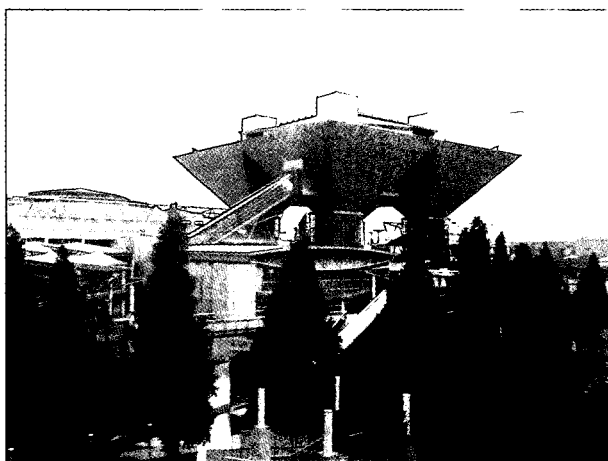
1 Tokyo Metropolitan Area and 3 Ring Roads



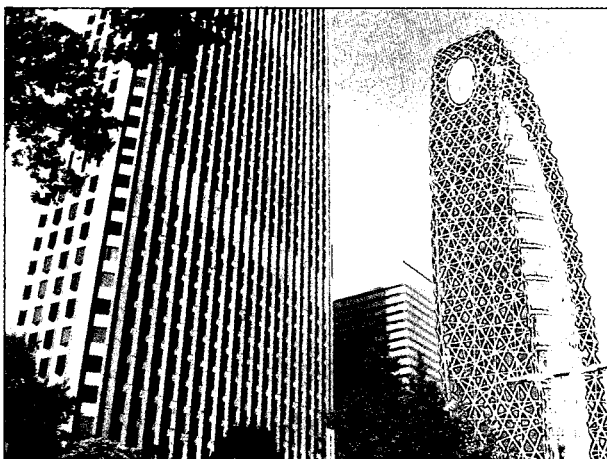
2 Community organizations such as public housing are firmly operated
(Public housing complex in Shioiri, Arakawa Ward, Tokyo)



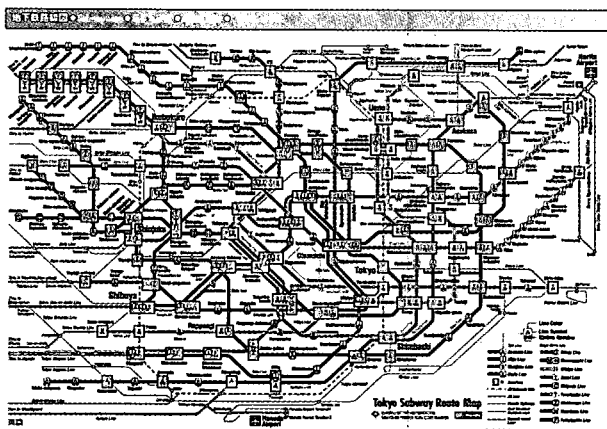
3 Waterfront Subcenter



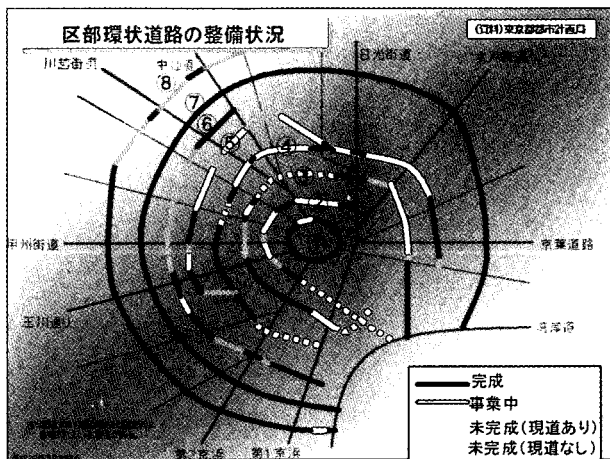
4 Big Site in the Waterfront Subcenter
(International Conference Center and International Exhibition Center)



5 A corner of the Shinjuku Subcenter



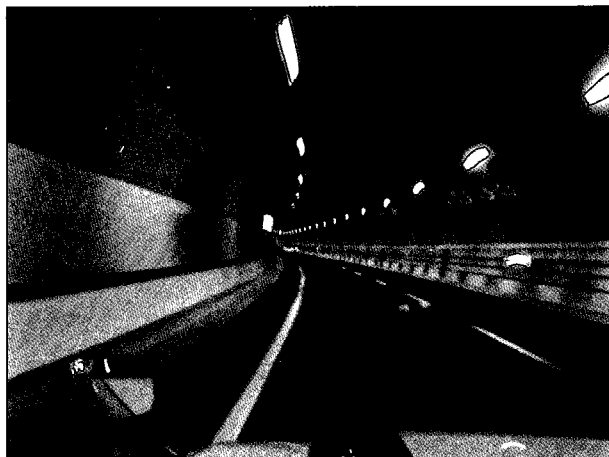
6 Tokyo Subway Map



7 8 Ring Road plans in the 23 special wards



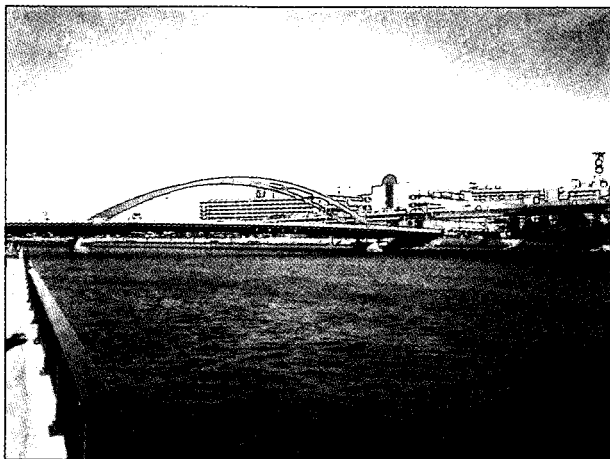
8 Akasaka Mitsuke Junction at the Shuto Expressway



9 Tunnel at the Shuto Expressway Central Circular Route



10 Mizumoto Koen Park that Tokyo Metropolitan Government repossessed when General MacArthur sold a number of small pieces of lands under the emancipation of farm lands



11 Tokyo Waterfront: In the proximity of Otakebashi bridge over Sumida River



12 Tokyo Waterfront: In the proximity of Ookayabata area



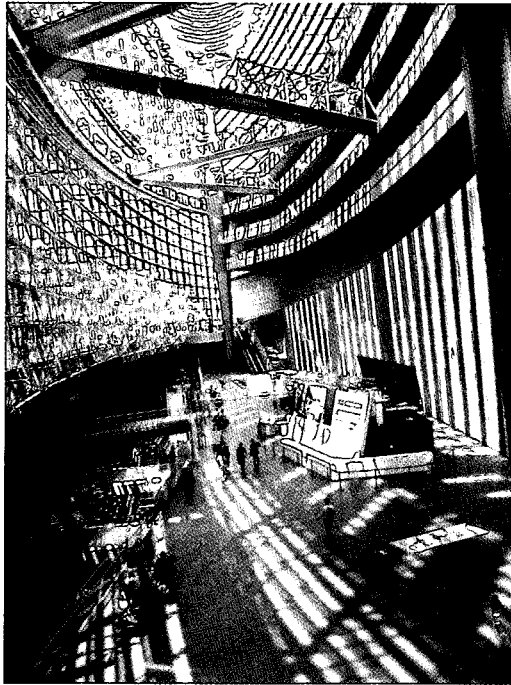
13 The heart of Tokyo: Marunouchi Building
(left-side) and Shin Marunouchi Building (right-side)



14 Ginza Dori street before the regulation of the floor-area ratio took effect



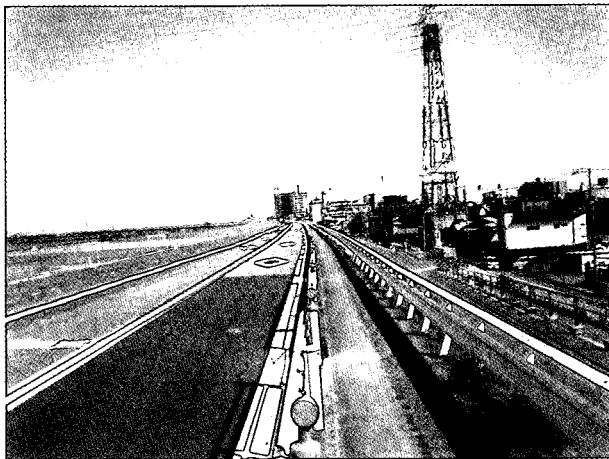
15 Roppongi Hills (left-side)



- 16 Tokyo International Forum whose building is tall but its floor-area ratio is low (It was built after the Tokyo Metropolitan Government headquarters moved to Shinjuku)



17 Evacuation of the island's entire population at the eruption of the Miyakejima island in 2000



18 Floodways in Arakawa area in the 1910s



19 The eruption of Oshima island in 1986

ロンドンプラン

グレーター・ロンドンの空間開発戦略



大ロンドン市長 ケン・リビングストン氏
ロンドンプラン研究会 会
元東京都副知事 阿部 信司

20 London Plan (translated by Professor Aoyama)



- 21 Planned site for the main center of the 2016 Tokyo Olympic Games:
Harumi (the nearest vacant space)